FILE-ATTRIBUTES

File	1
Op-Sys	OS/390, VSE/ESA, BS2000/OSD
Statement	FIND
Task	Display attributes for a given file, for example, record format, block size, record length.

Common Fields for all Operating Systems

Dictionary Field Name	F/L	Mu	DE	Remarks
ERROR-CODE	N3			
ERROR-TEXT	A58			
NODE	N3		D	
NODE-NAME	A16		D	
SYSTEM-MESSAGE-CODE	A10			
VOLSER	A6		D	Required in VSE/ESA. In BS2000/OSD, no descriptor.
DSNAME	A54		D	Required.
DSORG	A4			
CREATION-DATE	A8			
EXPIRATION-DATE	A8			
LAST-TTR	B3			Not for VSE/ESA.
FILE-SIZE	N7			
SECURITY	A5			Not for VSE/ESA.
SERIES	A8			
CREATION-DATX	D			
EXPIRATION-DATX	D			
PRODUCT	A1			
LRECL	N5			
BLKSIZE	N5			
RECFM	A5			

Additional Fields Supported for OS/390

Dictionary Field Name	F/L	Mu	DE	Remarks
PAGES-USED	N10			PDSE only: Number of used pages.
PASSWORD	A8		D	
EXTENTS	A192			
CYLINDERS-ALLOCATED	N7			
TRACKS-ALLOCATED	N3			
UNIT	A3			
NUMBER-OF-EXTENTS	N3			
ALLOCATION-TYPE	A3			
SECONDARY-QTY	N7			Secondary allocation quantity in Unit of Allocation type.
PERCENT-USED	N3			
LAST-REFERENCE	A8			
LAST-REFERENCE-DATX	D			
NUMBER-OF-MEMBERS	N7			
TOTAL-DIRECTORY-BLOCKS	N5			
UNUSED-DIRECTORY-BLOCKS	N5			
UPDATED-SINCE-BACKUP	A3			
SMS	A3			
OPTIONS	A80			
SMS-STORAGE-CLASS	A8		D	
SMS-MANAGEMENT-CLASS	A8		D	
SMS-DATA-CLASS	A8		D	

Additional Fields Supported for VSE/ESA

Dictionary Field Name	F/L	Mu	DE	Remarks
EXTENTS	A192			
CYLINDERS-ALLOCATED	N7			
TRACKS-ALLOCATED	N3			
UNIT	A3		D	

Additional Fields Supported for BS2000/OSD

Dictionary Field Name	F/L	Mu	DE	Remarks
SYSTEM-CODE	B2			
NUMBER-OF-EXTENTS	N3			
ALLOCATION-TYPE	A4			
SECONDARY-QTY	N7			Secondary allocation quantity in Unit of Allocation type.
PERCENT-USED	N3			
LAST-REFERENCE	A8			
LAST-REFERENCE-DATX	D			
SHARE	A4			
READ-PASSWORD	A8			
WRITE-PASSWORD	A8			
EXEC-PASSWORD	A8			
KEY-LENGTH	N4			
KEY-POSITION	N5			
ACCESS-NUMBER	N4			
VERSION-NUMBER	N4			
BACKUP-TYPE	A1			
ACCESS-TYPE	A5			
AUDIT-TYPE	A4			
MODIFICATION-DATX	D			Only for BS2000/OSD V11 (OSD V1) or above.
MODIFICATION-TIMX	T			Only for BS2000/OSD V11 (OSD V1) or above.
SERIES-ARRAY	A8	30		List of max. 30 device types in case of extents (disk files only).
VOLSER-ARRAY	A6	30		For tape files: list of max. 30 VOLUMES (MULTI-VOL.-FILE). First volser also in field VOLSER.
BLOCK-CONTROL	A6			
FILE-SEQUENCE-NUMBER	N3			
LABEL	A7			
BACKUP-INFO	A19		D	
BACKUP-VERSION-NUMBER	N5.0		D	
MIGRATE	A9		D	
STORAGE-LEVEL	A2		D	
CODE	A6			

Relevant Error Codes

Code	Text	OS/390	VSE/ESA	BS2000/OSD
500	VSAM error	X		
530	Access denied by Security Facility			X
565	Syntax error in dataset name			X
696	Cannot assign logical unit		X	
699	GETVIS failed	X	X	
701	DSNAME missing	X	X	X
733	User ID does not exist			X
772	Requested dataset not found			X
799	Entire System Server internal error			X
878	Volume defined as DYNAM/D pool name.		X	
899	I/O error during read	X	X	
993	Open error	X		
994	File not on volume		X	
996	Volume not online		X	

Field Descriptions

Field Name	Type/Length	Operating System
ACCESS-NUMBER	(N4)	BS2000/OSD

Shows how many times the file was accessed.

Field Name	Type/Length	Operating System
ACCESS-TYPE	(A5)	BS2000/OSD

Shows whether the access mode is READ or WRITE.

Field Name	Type/Length	Operating System
ALLOCATION-TYPE	(A4)	OS/390, BS2000/OSD

Allocation type specified. Possible values:

OS/390	BS2000/OSD
ABS = Absolute BLK = Block CYL = Cylinders TRK = Track	FGG = File generation group NONE = Undefined NSTD = Non-standard blocks (tape files) PAM = PAM blocks (standard)

Field Name	Type/Length	Operating System
AUDIT-TYPE	(A4)	BS2000/OSD

Shows which type of access to the file must be controlled.

Field Name	Type/Length	Operating System
BACKUP-INFO	(A19)	BS2000/OSD

Additional information about backup status:

- LARG   LARGE = YES
- MIGR   MIGRATED = YES
- OPEN   OPEN BACKUP
- PART   PARTIAL RESTORE

Field Name	Type/Length	Operating System
BACKUP-TYPE	(A1)	BS2000/OSD

Shows how often the file should be saved by ARCHIVE.

Field Name	Type/Length	Operating System
BACKUP-VERSION-NUMBER	(N5.0)	BS2000/OSD

Internal attribute for change save with the ARCHIVE or HSMS utility routine.

Field Name	Type/Length	Operating System
BLKSIZE	(N5)	OS/390, VSE/ESA, BS2000/OSD

Block size.

Field Name	Type/Length	Operating System
BLOCK-CONTROL	(A6)	BS2000/OSD

Possible values:

Value	Explanation
DATA	PAM key information within data (NK disks only)
NO	No PAM key information (NK disks only)
NONE	Block control undefined
PAMKEY	PAM key separate from data

Field Name	Type/Length	Operating System
CODE	(A6)	BS2000/OSD

Code of tape file.

Field Name	Type/Length	Operating System
CREATION-DATE	(A8)	OS/390, VSE/ESA, BS2000/OSD

Creation date in the format DD/MM/YY. If no creation date is specified, this field is filled with asterisks ********.

Field Name	Type/Length	Operating System
CREATION-DATX	(D)	OS/390, VSE/ESA, BS2000/OSD

Creation date in Natural format.

Field Name	Type/Length	Operating System
CYLINDERS-ALLOCATED	(N7)	OS/390, VSE/ESA

Number of integral cylinders allocated.

Field Name	Type/Length	Operating System
DSNAME	(A54)	OS/390, VSE/ESA, BS2000/OSD

Fully qualified dataset name.

Field Name	Type/Length	Operating System
DSORG	(A4)	OS/390, VSE/ESA, BS2000/OSD

Dataset organization.
In OS/390 for example: PS, PO, VS.
In VSE/ESA: VS, DA, SD, SD/L, VS/L (where **xx/L** indicates that the file is a VSE/ESA Librarian file). In BS2000/OSD, this is the FCBTYPE.

Field Name	Type/Length	Operating System
EXEC-PASSWORD	(A8)	BS2000/OSD

If caller is TSOS and Entire System Server is running under TSOS, the EXEC password of the file is returned, if one exists (see field SECURITY).

Field Name	Type/Length	Operating System
EXPIRATION-DATE	(A8)	OS/390, VSE/ESA, BS2000/OSD

Expiration date in the format DD/MM/YY. If no creation date is specified, this field is filled with asterisks ********.

Field Name	Type/Length	Operating System
EXPIRATION-DATX	(D)	OS/390, VSE/ESA, BS2000/OSD

Expiration date in Natural format.

Field Name	Type/Length	Operating System
EXTENTS	(A192)	OS/390, VSE/ESA

Extent information, 16 entries of 12 bytes each. Each entry contains:

- Low cylinder and head (track) address of extent (binary CCHH)
- High cylinder and head (track) address of extent (binary CCHH)
- Number of cylinders in extent
- Number of additional tracks in extent

Field Name	Type/Length	Operating System
FILE-SEQUENCE-NUMBER	(N3)	BS2000/OSD

Only for tape files: file sequence number on tape.

Field Name	Type/Length	Operating System
FILE-SIZE	(N7)	OS/390, VSE/ESA, BS2000/OSD

Number of tracks currently allocated. (CYLINDERS-ALLOCATED in tracks + TRACKS- ALLOCATED). In BS2000/OSD, this field contains the number of allocated PAM pages.

Field Name	Type/Length	Operating System
KEY-LENGTH	(N4)	BS2000/OSD

Key length for ISAM files.

Field Name	Type/Length	Operating System
KEY-POSITION	(N5)	BS2000/OSD

Position of the first byte of the key within a record.

Field Name	Type/Length	Operating System
LABEL	(A7)	BS2000/OSD

Type of label (tape files only).

Field Name	Type/Length	Operating System
LAST-REFERENCE	(A8)	OS/390, BS2000/OSD

Last reference date in format DD/MM/YY. If the last reference date is null, this field is filled with asterisks ****.

Field Name	Type/Length	Operating System
LAST-REFERENCE-DATX	(D)	OS/390, BS2000/OSD

Last reference date in Natural format.

Field Name	Type/Length	Operating System
LAST-TTR	(B3)	OS/390, BS2000/OSD

- OS/390: Last track.
- BS2000/OSD: Last used page of the file.

Field Name	Type/Length	Operating System
LRECL	(N5)	OS/390, VSE/ESA, BS2000/OSD

Logical record length.

Field Name	Type/Length	Operating System
MIGRATE	(A9)	BS2000/OSD

Indicates whether the file may be migrated: ALLOWED | INHIBITED.

Field Name	Type/Length	Operating System
MODIFICATION-DATX	(D)	BS2000/OSD

Date of last modification. Only available for BS2000/OSD V11 (OSD V1) or above.

Field Name	Type/Length	Operating System
MODIFICATION-TIMX	(D)	BS2000/OSD

Time of last modification. Only available for BS2000/OSD V11 (OSD V1) or above.

Field Name	Type/Length	Operating System
NUMBER-OF-EXTENTS	(N3)	OS/390, BS2000/OSD

Number of extents.

- OS/390: Values are 1 - 16
- BS2000/OSD: Values are 1 - 255.

Field Name	Type/Length	Operating System
NUMBER-OF-MEMBERS	(N7)	OS/390

Number of members in the dataset. If the dataset is not a partitioned dataset, this field shows **0**.

Field Name	Type/Length	Operating System
OPTIONS	(A80)	OS/390

Options for PANVALET, CA-LIBRARIAN, etc.

Field Name	Type/Length	Operating System
PAGES-USED	(N10)	OS/390

The number of pages allocated for members and directory information in a PDSE.

Field Name	Type/Length	Operating System
PASSWORD	(A8)	OS/390

Specify password for protected datasets. Not required in BS2000/OSD.

Field Name	Type/Length	Operating System
PERCENT-USED	(N3)	OS/390, BS2000/OSD

Tracks used / tracks allocated. In BS2000/OSD, PAM pages used / total PAM pages allocated.

Field Name	Type/Length	Operating System
PRODUCT	(A1)	OS/390, VSE/ESA, BS2000/OSD

Access method used. Possible values:

Value	Explanation
L	CA-LIBRARIAN
M	BS2000/OSD LMS (only for PLAM lib)
P	PANVALET
S	VSE/ESA SAM (SD) file

Field Name	Type/Length	Operating System
READ-PASSWORD	(A8)	BS2000/OSD

If caller is TSOS and Entire System Server is running under TSOS, the READ password of the file is returned, if one exists (see field SECURITY).

Field Name	Type/Length	Operating System
RECFM	(A5)	OS/390, VSE/ESA, BS2000/OSD

Record format.

Field Name	Type/Length	Operating System
SECONDARY-QTY	(N7)	OS/390, BS2000/OSD

Secondary allocation quantity in Unit of Allocation type.

Field Name	Type/Length	Operating System
SECURITY	(A5)	OS/390, BS2000/OSD

Security status. Possible values:

Value	Explanation
NONE	Not password-protected.
READ	Password-protected for read and write operations.
WRITE	Password-protected for write operations.

Additional values for BS2000/OSD

Value	Explanation
EXEC	Password-protected for execute operations.
R/E	Password-protected for read and execute operations.
R/W	Password-protected for read and write operations.
R/W/E	Password-protected for read, write and execute operations.
W/E	Password-protected for write and execute operations.

Field Name	Type/Length	Operating System
SERIES	(A8)	OS/390, VSE/ESA, BS2000/OSD

Device series for the unit, for example, 3380. In BS2000/OSD, an example is D3480.

Field Name	Type/Length	Operating System
SERIES-ARRAY	(A8) 30	BS2000/OSD

List of max. 30 device series. The first SERIES is also given in the field SERIES.

Field Name	Type/Length	Operating System
SHARE	(A4)	BS2000/OSD

Shows whether the file is accessible to other users.

Field Name	Type/Length	Operating System
SMS	(A3)	OS/390

Specifies whether the dataset is SMS-managed YES or NO.

Field Name	Type/Length	Operating System
SMS-DATA-CLASS	(A8)	OS/390

Data class of SMS-managed dataset.

Field Name	Type/Length	Operating System
SMS-MANAGEMENT-CLASS	(A8)	OS/390

Management class of SMS-managed dataset.

Field Name	Type/Length	Operating System
SMS-STORAGE-CLASS	(A8)	OS/390

Storage class of SMS-managed dataset.

Field Name	Type/Length	Operating System
STORAGE-LEVEL	(A2)	BS2000/OSD

Indicates the storage level for migrated files: S0 | S1 | S2 | ...

Field Name	Type/Length	Operating System
TOTAL-DIRECTORY-BLOCKS	(N5)	OS/390

Number of directory blocks. If the dataset is not a partitioned dataset, this field shows **0**.

Field Name	Type/Length	Operating System
TRACKS-ALLOCATED	(N3)	OS/390, VSE/ESA

Number of remaining tracks allocated in addition to CYLINDERS-ALLOCATED.

Field Name	Type/Length	Operating System
UNIT	(A3)	OS/390, VSE/ESA

Unit on which the dataset is currently mounted.

Field Name	Type/Length	Operating System
UNUSED-DIRECTORY-BLOCKS	(N5)	OS/390

Number of unused directory blocks. If the dataset is not a partitioned dataset, this field shows 0.

Field Name	Type/Length	Operating System
UPDATED-SINCE-BACKUP	(A3)	OS/390

Specifies whether the dataset has been updated since the last backup YES or NO.

Field Name	Type/Length	Operating System
VERSION-NUMBER	(N4)	BS2000/OSD

Version number of the file.

Field Name	Type/Length	Operating System
VOLSER	(A6)	OS/390, VSE/ESA, BS2000/OSD

Volume serial number. If not specified, the catalog entry for the dataset is used. In BS2000/OSD, only relevant for tape files. Returns first VOLSER. For multi-volume file, see VOLSER- ARRAY.

Field Name	Type/Length	Operating System
VOLSER-ARRAY	(A6) 30	BS2000/OSD

List of max. 30 volumes (multi-volume file). The first VOLSER is also given in the field VOLSER.

Field Name	Type/Length	Operating System
WRITE-PASSWORD	(A8)	BS2000/OSD

If caller is TSOS and Entire System Server is running under TSOS, the WRITE password of the file is returned, if one exists (see the field SECURITY).